

# **A G E N D A**

## **UTAH BOARD OF WATER RESOURCES**

Department of Natural Resources  
1594 W. North Temple  
Salt Lake City, Utah

August 13, 2004

**1:00 p.m.**

I. CALL TO ORDER

II. APPROVAL OF MINUTES - July 9, 2004

III. CHAIR'S REPORT

IV. FEASIBILITY REPORTS

County

E129 St. George & Washington Canal Co.  
E132 Leeds Water Co.

Washington  
Washington

V. SPECIAL ITEMS

E020 Center Creek Culinary Water Co.  
(Reauthorization & Committal of Funds)  
E060 Hooper Irr. Co. (Amendment)  
E122 Holliday Water Co.  
(Reauthorization & Committal of Funds)

Wasatch  
Weber  
Salt Lake

VII. DIRECTOR'S REPORT

VIII. OTHER ITEMS

IX. NEXT BOARD MEETING - September 24, 2004 - Escalante Area

X. ADJOURNMENT

## **BRIEFING MEETING AGENDA**

### **UTAH BOARD OF WATER RESOURCES**

Department of Natural Resources  
1594 W. North Temple  
Salt Lake City, Utah

August 13, 2004

**9:30 a.m.**

- |      |                         |                  |
|------|-------------------------|------------------|
| I.   | WELCOME/CHAIR'S REPORT  | Chairman Shirley |
| II.  | DISCUSSION OF PROJECTS  | Board/Staff      |
| III. | ROBERT'S RULES OF ORDER |                  |
| IV.  | OTHER ITEMS             |                  |

**BOARD OF WATER RESOURCES**

**Revolving Construction Fund**

**Funding Status**

**August 13, 2004**

Funds Available for Projects This FY	\$	4,940,000
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**Projects Contracted This FY**

Total Funds Contracted	\$	-
Funds Balance	\$	4,940,000

**Projects with Funds Committed**

1 Kanab Irr Co	D968	\$	377,000
2 South Willard Water Co (Amend)	E119		90,000
3 Chester Irr Co	E138		48,000
4 Piute Res & Irr Co (Piute Dam)	C022 Grant **		4,180,000
5 Piute Res & Irr Co (Piute Dam)	C022 Loan **		220,000
6 Kays Creek Irr Co (Adams Dam) Amd	C001 Grant **		4,000
Commitments for Dam Safety Studies	**		<u>136,000</u>

Total Funds Committed	\$	5,055,000
Funds Balance	\$	(115,000)

**Projects Authorized**

1 Deseret Irr Co	E056	\$	432,000
2 West Panguitch Irr & Res Co	E105		137,000
3 Hi-Country Estates Homeowners Assn	E127		406,000
* 4 Leeds Water Co	E132		697,000

Total Funds Authorized	\$	1,672,000
Remaining Funds Available	\$	(1,787,000)

\* To be presented at Board Meeting

\*\* Dam Safety Projects

**BOARD OF WATER RESOURCES**

**Cities Water Loan Fund**

**Funding Status**

**August 13, 2004**

Funds Available for Projects This FY	\$	2,096,000
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**Bonds Closed This FY**

Total Bonds Closed	\$	-
Funds Balance	\$	2,096,000

**Projects with Funds Committed**

1	\$	-
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Total Funds Committed	\$	-
Funds Balance	\$	2,096,000

**Projects Authorized**

1	\$	-
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Total Funds Authorized	\$	-
Remaining Funds Available	\$	2,096,000

\* To be presented at Board Meeting

**BOARD OF WATER RESOURCES**

**Conservation & Development Fund**

**Funding Status**

**August 13, 2004**

Funds Available for Projects This FY \$ 17,414,000

**Projects Contracted/Bonds Closed This FY**

1 City of St. George (Bond Ins.) E137 145,000

Total Funds Contracted/Closed \$ 145,000

Funds Balance \$ 17,269,000

**Projects with Funds Committed**

1 MWD of Salt Lake & Sandy E134 \$ 500,000

2 Pleasant Grove City E126 115,000

3 Lake Creek Irr Co (Ph 1) E102 22,500

4 Ephraim Irr Co E061 1,500,000

\* 5 Hooper Irr Co (Press Irr, Phase I amendment) E060 85,000

\* 6 Center Creek Culinary Water Co E020 877,000

\* 7 Holliday Water Co E122 1,500,000

Total Funds Committed \$ 4,100,000

Funds Balance \$ 13,169,000

**Projects Authorized**

1 Strawberry High Line Canal Co D976 \$ 3,187,000

2 Uintah WCD (Island Ditch) E036 720,000

3 Richland Nonprofit Water Co E087 335,000

4 Lake Creek Irr Co (Ph 2) E102 300,000

5 Tropic & East Fork Irr Co (Ph 2) E104 220,000

6 West Point City L546 410,000

7 Centerfield Town L547 255,000

8 New Escalante Irr Co E077 300,000

\* 9 St George & Washington Canal Co E129 11,000,000

Total Funds Authorized \$ 16,727,000

Remaining Funds Available \$ (3,558,000)

\* To be presented at Board Meeting

# BOARD OF WATER RESOURCES

August 13, 2004

ADDITIONAL ACTIVE PROJECTS			Fund	Est. Board Cost	Total Cost
<b>Authorized or Committed Projects</b>					
1 Davis & Weber Counties Cnl Co (Ph 4)	D674	C&D		\$ 10,379,000	\$ 12,211,000
2 Central Utah WCD (Prepay FY98,99,00)	D960	C&D		3,000,000	3,000,000
3 Weber Basin WCD (Secondary Irr, Ph 3-5)	E029	C&D		27,721,000	32,613,000
4 Davis & Weber Counties Cnl Co(Cnl Rehab)	E035	C&D		15,497,000	18,232,000
5 Hooper Irr Co (Press Irr, Ph 2-4)	E060	C&D		11,772,000	13,850,000
6 Town of Brian Head	L541	C&D		1,700,000	2,000,000
7 City of Cedar Hills	E099	C&D		31,200	31,200
Subtotal				\$ 70,100,200	\$ 81,937,200
<b>Projects Under Investigation</b>					
1 Keith Johnson	D996	RCF		\$ 37,500	\$ 50,000
2 Mayfield Irr Co	E067	RCF		187,500	250,000
3 Rock Dam Irr Co	E083	RCF		37,500	50,000
4 Mower Ditch Co	E133	RCF		135,000	180,000
5 M&M Irr Co	E136	RCF		1,031,250	1,375,000
6 Downs Ditch Water Co	E139	RCF		281,250	375,000
7 Co-Op Farm Irr Co	E140	RCF		374,250	499,000
8 Anderson, Felt, Winters Ditch Co	E141	RCF		148,500	198,000
9 Felt, Peterson, Slater Ditch Co	E142	RCF		148,500	198,000
10 Huntsville South Bench Canal Co	E143	RCF		258,750	345,000
11 Emmertsen Irr Co	E144	RCF		86,250	115,000
12 Huntsville Irr Co	E146	RCF		627,000	836,000
13 West Porterville Pipeline Co	E148	RCF		22,500	30,000
14 Parowan City	E121	CWL		158,250	211,000
15 Woodruff Irrigating Co	D680	C&D		600,000	800,000
16 Kane County WCD	D828	C&D		1,500,000	2,000,000
17 Uintah WCD (Leota Bench)	D944	C&D		750,000	1,000,000
18 Gunnison Butte Mutual Irr Co	E004	C&D		10,500,000	14,000,000
19 City of South Jordan ( Secondary Irr)	E034	C&D		2,253,000	3,004,000
20 Hyrum Blacksmith Fork Irr Co	E047	C&D		1,230,000	1,640,000
21 East Juab County WCD	E071	C&D		375,000	500,000
22 Ferron Canal & Res Co	E082	C&D		2,625,000	3,500,000
23 Whiterocks Irr Co	E084	C&D		1,500,000	2,000,000
24 Logan, Hyde Park, Smithfield Canal Co	E096	C&D		1,301,250	1,735,000
25 Newton Water Users Association	E100	C&D		1,001,250	1,335,000
26 Town of Goshen	E109	C&D		240,000	320,000
27 Weber-Box Elder Conservation Dist	E113	C&D		9,750,000	13,000,000
28 Cottonwood Creek Consolidated Irr Co	E125	C&D		3,750,000	5,000,000
29 Alton Farmers Assoc	E128	C&D		1,650,000	2,200,000
30 Huntington-Cleveland Irr Co	E130	C&D		21,299,000	66,090,000
31 Fremont Irr Co	E131	C&D		1,500,000	2,000,000
32 Ashley Valley Res Co	E145	C&D		1,425,000	1,900,000
33 Santaquin City	E147	C&D		6,828,000	9,104,000
* 34 Willow Creek Irr Co	E149	C&D		1,028,250	1,371,000
* 35 Grantsville Irr Co	E150	C&D		321,000	428,000
Subtotal				\$ 74,960,750	\$ 137,639,000
TOTAL				\$ 145,060,950	\$ 219,576,200

\* New Applications

## BOARD OF WATER RESOURCES

August 13, 2004

### INACTIVE PROJECTS

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#### Long Term Large Water Conservation Projects

1 Sanpete WCD (Narrows Dam)	D377
2 Wayne County WCD	D494
3 Cedar City Valley Water Users	D584
4 Bear River WCD	D738
5 Upper Sevier River WCD	E098

BOARD OF WATER RESOURCES

Feasibility Report

Conservation and Development Fund

Appl. No.: **E-129**  
Received: 1/22/04  
Approved: 3/11/04

To be Presented at the August 13, 2004 Board Meeting

SPONSOR: **ST. GEORGE AND WASHINGTON CANAL COMPANY**

President: Ralph Staheli

LOCATION: The proposed project is located east and south of St. George and Washington cities in Washington County.

EXISTING CONDITIONS & PROBLEMS: The sponsor delivers irrigation water from its canal to approximately 4,800 acres, 80-90% of which is farmland east and south of St. George and Washington; the remaining ground is parks, schools, golf courses, and residences.

Water is diverted from the Virgin River about four miles downstream of Quail Creek Reservoir and flows through the nearly ten mile-long, 125-65 cfs capacity, concrete-lined canal. The concrete is breaking up and the sponsor estimates that 10% of the canal water (about 4,400 acre-feet annually) is lost to seepage. The canal has washed out several times the past few years (as its integrity has been compromised by foundation saturation), flooding adjacent fields. With increasing development along and downstream of the canal, the sponsor is concerned with liability due to washouts and safety issues.

Washington County Water Conservancy District (WCWCD) is considering constructing a reservoir about two miles upstream of the canal diversion within the next 20 years, which could provide the sponsor opportunity for gravity pressurized sprinkle irrigation.



PROPOSED  
PROJECT:

The sponsor is requesting financial assistance from the board to replace the canal's concrete liner with 66 to 54-inch steel pipe.

Technical assistance is being provided by Alpha Engineering in St. George.

COST ESTIMATE:

The following cost estimate is based on the engineer's preliminary design and has been reviewed by staff:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Mobilization	LS	\$569,000	\$ 569,000
2.	Steel Pipe			
	a. 66-inch	25,400 LF	235	5,969,000
	b. 60-inch	10,300 LF	207	2,132,100
	c. 54-inch	13,650 LF	176	2,402,400
3.	Fittings	LS	205,000	205,000
4.	Valves	LS	474,000	474,000
5.	Air Vents	LS	71,000	71,000
6.	Connections	LS	7,500	7,500
Construction Cost				\$11,830,000
Contingencies				1,183,000
Legal and Administrative				238,000
Design and Construction Engineering				1,419,000
TOTAL				\$14,670,000

COST SHARING  
& REPAYMENT:

The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$11,000,000	75%
Sponsor	3,670,000	25
TOTAL	\$14,670,000	100%

If the board authorizes the project, it is suggested it be purchased in 30 years at 1% interest the first fifteen years, 2% interest the next eight, and 3% interest the last seven. The rate increases as farmland changes to residences and municipal users are able to pay more than agricultural users. It is anticipated annual payments will start at \$200,000 and increase up to 5.4% each year to a final payment of about \$920,000.

Although the sponsor would like to install all the pipeline in one year, the project can be broken into phases if needed to match board funding availability, with detailed repayment terms provided each time funds are committed.

ECONOMIC  
FEASIBILITY:

The proposed project is economically feasible if increased net income to farmers and municipal benefits of secondary irrigation resulting from 4,400 acre-feet of conserved water, plus avoided liability costs associated with piping an open canal, exceed the project cost.

It is assumed the conserved water will go initially to farmland (annual increased crop yield valued at \$160,000) and be converted to municipal secondary irrigation use over 20 years (resulting in a value of \$660,000 the final year). Avoided liability costs are assumed to be those of fencing both sides of the canal (\$1,880,000).

When all future costs and benefits are discounted to present worth at a rate of 3.9% over 50 years, the benefit/cost ratio is 1.1.

FINANCIAL  
FEASIBILITY:

The sponsor is considering assessing large shareholders such as St. George City and WCWCD, and those with only a few shares, a higher fee. It feels by doing so it can make payments to the board beginning at \$200,000 without excessively assessing agricultural users. This is equivalent to an average of \$60.61 per share; shareholders have been paying \$18 per share the past few years.

BENEFITS:

The proposed project will make an estimated additional 4,400 acre-feet of water available annually for agricultural and municipal use, reduce field damage and liability from canal washouts, reduce operation and maintenance costs, ease canal safety concerns, and pave the way for possible pressurized irrigation in the future.

PROJECT  
SPONSOR:

The St. George and Washington Canal Company was organized shortly after pioneers entered the St. George area, incorporated in 1900, and is currently registered in good standing with the state Department of Commerce. Its 3,300 shares are owned by 173 shareholders irrigating approximately 4,800 acres.

The company's largest shareholders include St. George Valley Irrigation Company, WCWCD, Bloomington Water Company, and St. George City, which own about a third of the total stock.

The sponsor received about \$300,000 from the board in the mid-1970s to help concrete-line seven miles of its canal; that assistance has been returned.

WATER RIGHTS  
& SUPPLY:

The sponsor diverts water under the following rights:

<u>Right Number</u>	<u>Source</u>	<u>Flow (cfs)</u>
81-174	Virgin River	30.0
81-1127	Virgin River	0.44
81-3542	Virgin River	1.07
81-3548	Virgin River	56.0
61-64	Navajo Lake	10.0

EASEMENTS:

The proposed pipeline will follow the existing canal alignment.

ENVIRONMENTAL:

No long-term environmental impacts are foreseen.

WATER  
CONSERVATION:

The proposed project will eliminate approximately 4,400 acre-feet of seepage annually.

SPONSOR'S  
RESPONSIBILITIES:

If the board authorizes the proposed project, the sponsor must do the following before construction can begin:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
2. Pass a resolution by the appropriate (as defined in the company's Articles of Incorporation and Bylaws) majority of company stock authorizing its officers to do the following:
  - a. Assign properties, easements, and water rights required for the project to the Board of Water Resources.
  - b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the Board.

3. Have an attorney give the Board of Water Resources a written legal opinion that:

a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.

b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.

c. The company has obtained all permits required for the project.

4. Have an attorney give the Board of Water Resources a written legal opinion that:

a. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.

b. The company's water rights applicable to the project are unencumbered and legally transferable to the Board of Water Resources, and that they cover the land to be irrigated by the project.

In lieu of an attorney's opinion, the company may obtain a title insurance policy in the name of the Board of Water Resources for the easements, rights-of-way, land, and water rights necessary for the project.

5. Obtain approval of final plans and specifications from the Division of Water Resources.

6. Prepare a water management and conservation plan for its service area, and obtain approval of it from the Division of Water Resources.

PROJECT  
CONTACT  
PEOPLE:

President:

Ralph Staheli

333 W. Millcreek Circle  
Washington, UT 84780  
Phone: (435) 673-3085

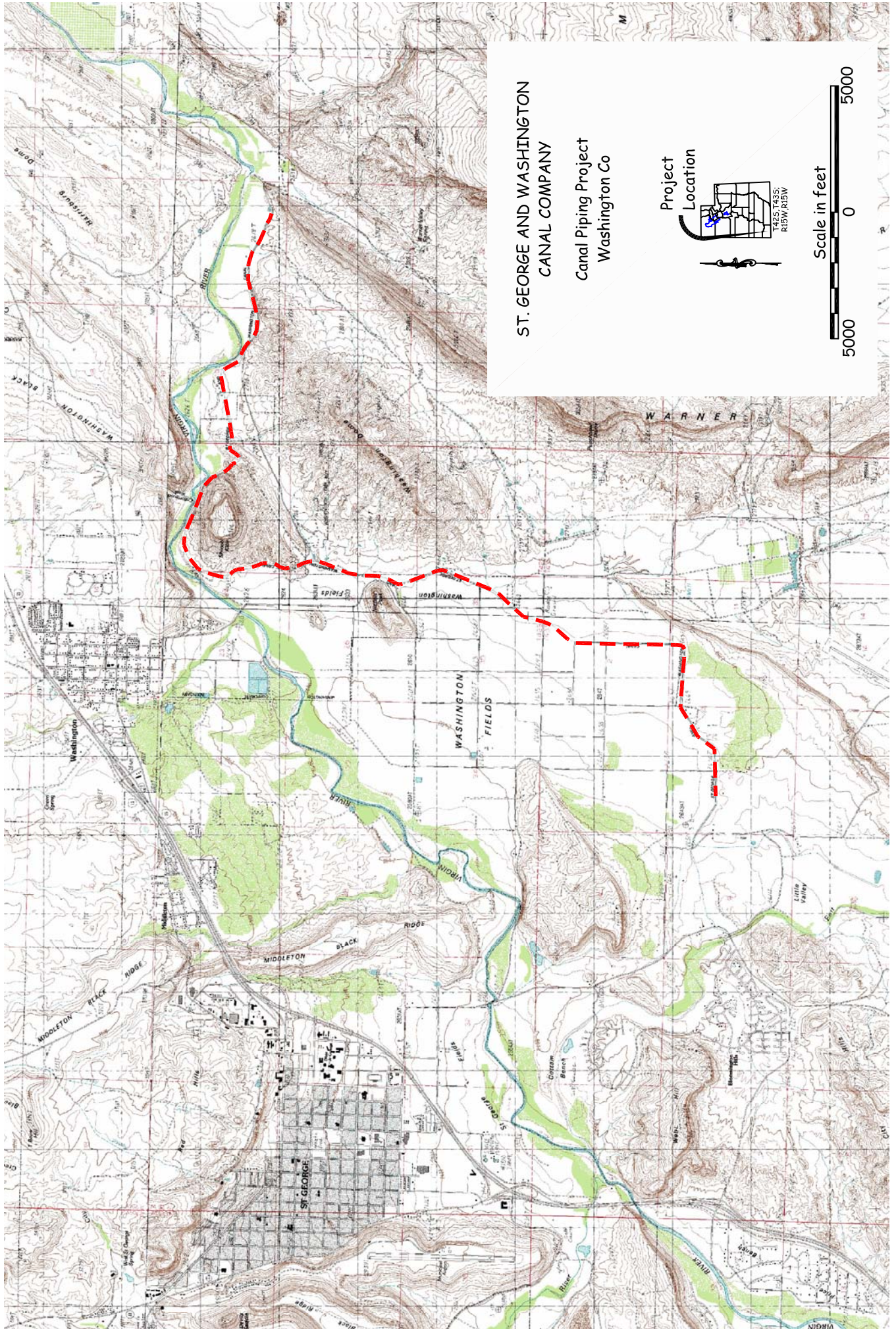
Secretary:

Ron Thompson  
136 North 100 East  
St. George, UT 84770  
Phone: (435) 673-3617

Engineer:

Alpha Engineering  
148 East Tabernacle  
St. George, UT 84770  
Phone: (435) 628-6500





**ST. GEORGE AND WASHINGTON  
CANAL COMPANY**

Canal Piping Project  
Washington Co

Project  
Location





BOARD OF WATER RESOURCES

Feasibility Report

Revolving Construction Fund

Appl. No.: **E-132**  
Received: 2/4/04  
Approved: 3/11/04

To be Presented at the August 13, 2004 Board Meeting

SPONSOR: **LEEDS WATER COMPANY**

President: Ned Sullivan

LOCATION: The proposed project is located west of and within the town of Leeds, about 16 miles northeast of St. George in Washington County.

EXISTING CONDITIONS & PROBLEMS: The sponsor provides irrigation water to about 190 agricultural acres and 70 acres of lawns and gardens in and around Leeds.

Water is diverted from Leeds Creek and flows just over two miles through an unlined transmission ditch to a small holding pond, and then to town and the majority of farmland; some water is diverted to lawns, gardens, and farms upstream of the pond.

Over half the water is lost to seepage before it reaches the pond. Additionally, almost all the water is distributed through unlined ditches and most of the land is flood irrigated, resulting in more loss. The sponsor is concerned about the safety aspects of open ditches in town, especially along Main Street.

PROPOSED PROJECT: The sponsor is requesting financial assistance from the board to replace its two miles of transmission ditch with 12-inch pipe, and install approximately five miles of 12 through 4-inch pipeline in town to provide pressurized irrigation.

Technical assistance is being provided by Alpha Engineering in St. George.

COST ESTIMATE: The following cost estimate is based on the engineer's preliminary design and has been reviewed by staff:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Mobilization	LS	\$35,000	\$ 35,000
2.	HDPE Pipe			
	a. 12-inch	12,150 LF	17.00	206,550
	b. 10-inch	1,450 LF	14.30	20,735
	c. 8-inch	22,100 LF	12.00	265,200
	d. 4-inch	2,000 LF	9.00	18,000
3.	Fittings	LS	12,000	12,000
4.	Valves	LS	11,000	11,000
5.	Service Connections	LS	54,000	54,000
6.	Pressure Station	LS	20,000	20,000
7.	Pavement Repair	LS	16,500	16,500
Construction Cost				\$658,985
Contingencies				66,015
Legal and Administrative				16,000
Design and Construction Engineering				79,000
TOTAL				\$820,000

COST SHARING & REPAYMENT: The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$697,000	85%
Sponsor	123,000	15
TOTAL	\$820,000	100%

If the board authorizes the project, it is suggested it be purchased at 0% interest over approximately 20 years with annual payments of \$35,000 through 2020, and \$38,600 from 2021 through the end of the purchase period.

Because of recent maintenance projects whose cost has necessitated higher than average shareholder assessments and has reduced the sponsor's cash reserves, it requests 15% cost sharing.

FINANCIAL FEASIBILITY: Benefits of installing the project consist of increased crop yields resulting from eliminated ditch seepage, and reduced operation and maintenance costs. Annual net benefits are computed as follows:



Annual Benefit of Water Savings	\$ 46,500
Annual Cost Reduction of O&M	2,000
Less On-Farm Cost (\$300/acre for 190 acres @ 5% interest over 10 years)	<u>-7,400</u>

ANNUAL NET BENEFIT	\$ 41,100
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With the proposed board share of the project being 85%, it is suggested the sponsor's repayment ability be calculated as approximately 85% of the annual net benefit, or \$35,000 per year.

BENEFITS: The proposed project will make an estimated additional 800 acre-feet of water available annually for farms, lawns, and gardens. Operation and maintenance costs will be reduced, and safety concerns of town ditches will be eased.

PROJECT SPONSOR: Leeds Water Company was incorporated in 1924 and is presently registered in good standing with the state Department of Commerce. It consists of 140 shareholders irrigating about 260 acres and holding 250 shares of class A stock and 74 shares of class B, or high water, stock. Shareholders in and around Leeds have paid an average of \$55 per share for class A stock and about 1/3 of that for class B the last few years. Those who receive their water higher up in the system pay a reduced assessment.

In 1972 the sponsor received about \$17,000 from the board to drill a well, rebuild a diversion structure, and concrete-line a thousand feet of canal. Insufficient water was found to warrant developing the well, but the other improvements were completed and board assistance was returned by 1983. In the late 1990s the sponsor received about \$69,000 from the board to replace three irrigation ditches with pipe, and construct three concrete transition structures. That project is being returned to the board with annual payments of \$3,600 through about 2020.

WATER RIGHTS & SUPPLY: Water Right 81-3299 is a primary right (Class A) for the year-round diversion of up to 4.1 cfs from Leeds Creek, and 81-3764 a high water right (Class B) for the year-round diversion of up to 0.69 cfs from Leeds Creek when its flow exceeds 4.1 cfs. Both

rights are covered by Change Application a25303 which allows for the irrigation of 260.55 acres, and are in the name of the board.

The creek flow averages 9.2 cfs from June through September.

EASEMENTS: The pipeline will follow the existing ditch alignment in its upper reaches and existing roads down lower. Below the diversion it will cross U.S. Forest Service land, then private ground and town property.

ENVIRONMENTAL: The proposed pipeline will dewater the existing ditch which will affect flora and fauna that have relied upon it since its construction. Several residents of the Silver Reef area west of town have voiced concerns about the dewatering and are opposed to the project as proposed; they would like to work with the sponsor in keeping water in the ditch in some areas.

WATER CONSERVATION: The proposed project will eliminate approximately 800 acre-feet of seepage annually which will be used throughout the irrigation system.

SPONSOR'S RESPONSIBILITIES: If the board authorizes the proposed project, the sponsor must do the following before construction can begin:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.

2. Pass a resolution by the appropriate (as defined in the company's Articles of Incorporation and Bylaws) majority of company stock authorizing its officers to do the following:

- a. Assign properties and easements required for the project to the Board of Water Resources.

- b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the Board.

3. Have an attorney give the Board of Water Resources a written legal opinion that:

a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.

b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.

c. The company has obtained all permits required for the project.

4. Have an attorney give the Board of Water Resources a written legal opinion that the company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.

In lieu of an attorney's opinion, the company may obtain a title insurance policy in the name of the Board of Water Resources for the easements, rights-of-way, and land necessary for the project.

5. Obtain approval of final plans and specifications from the Division of Water Resources.

6. Notify the Division of Drinking Water of the town portion of the project and provide it opportunity to comment.

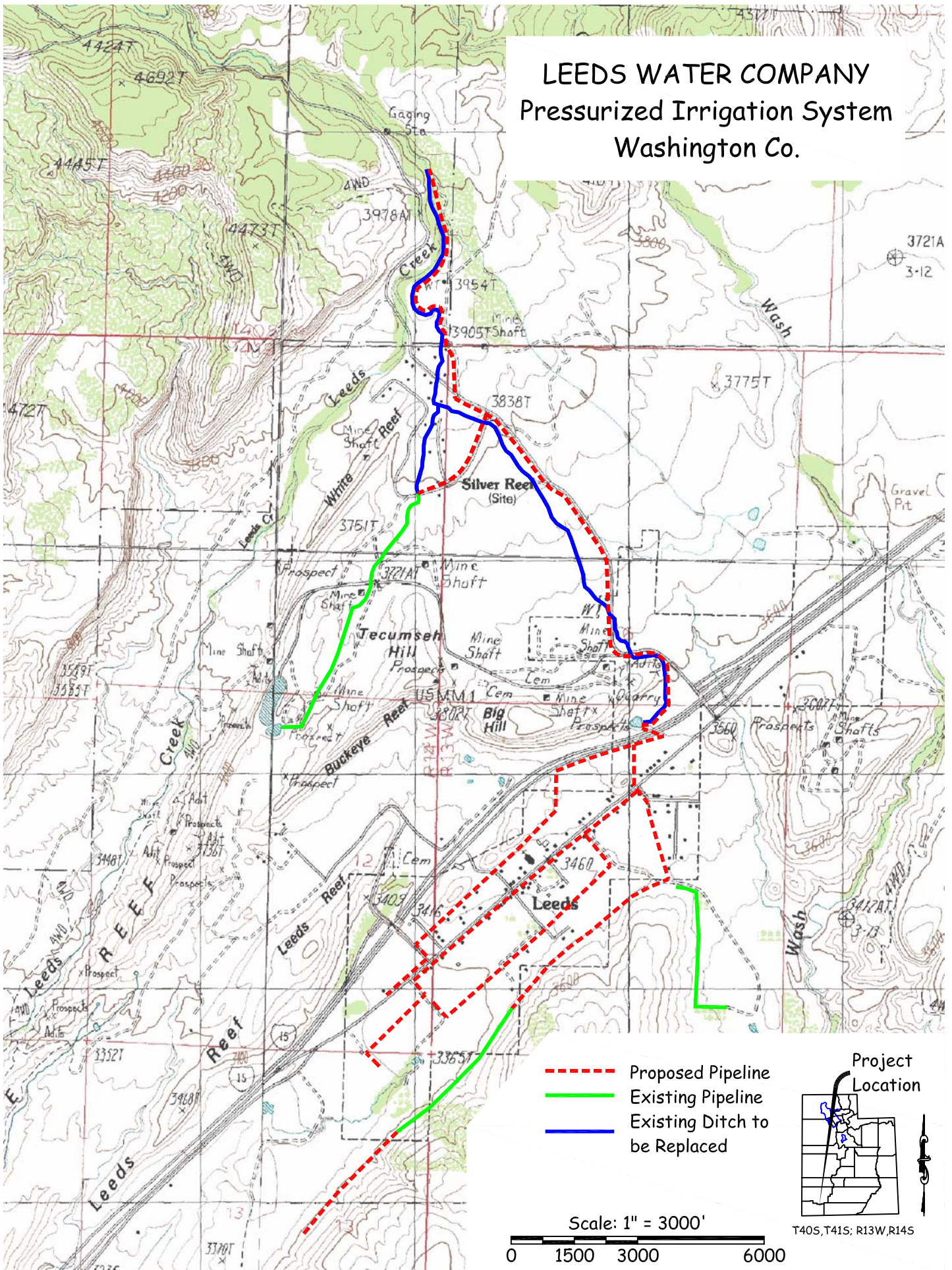
7. Review and update its water management and conservation plan, and obtain approval of it from the Division of Water Resources.

PROJECT  
CONTACT  
PEOPLE:

President: Ned Sullivan  
PO Box 460970  
Leeds, UT 84746  
Phone: (435) 879-2589

Engineer: Alpha Engineering  
148 East Tabernacle  
St. George, UT 84770  
Phone: (435) 628-6500

# LEEDS WATER COMPANY Pressurized Irrigation System Washington Co.





BOARD OF WATER RESOURCES

Special Item

Feasibility Report (Reauthorization) & Committal of Funds

Conservation and Development Fund

Appl. No.: **E-020**

Received: 11/22/99

Approved: 12/10/99

Authorized: 3/9/00

To be Presented at the August 13, 2004 Board Meeting

SPONSOR: **CENTER CREEK CULINARY WATER COMPANY**

President: Duane Sweat

LOCATION: The proposed project is located about three miles southeast of Heber City in Wasatch County.

SUMMARY: The sponsor provides culinary water for indoor use to 72 connections in the unincorporated Center Creek area southeast of Heber. Water is supplied by two springs, flows by gravity to a 50,000 gallon concrete storage tank, and is then distributed to users through a 4 and 6-inch pipeline distribution system. The water system is currently rated "Corrective Action" by the Division of Drinking Water because of failure to maintain minimum pressures throughout the system and inadequate storage capacity.

The distribution system is 40 year-old cast iron pipe too small to provide currently required fire flows, plus it leaks extensively. The storage tank is in good condition but too small for fire protection storage, and the springs do not have adequate flow to provide for growth.

In early 2000 the board authorized a project for the sponsor consisting of redeveloping and modernizing its existing springs, developing a new spring, installing about three miles of spring transmission pipeline, and constructing a 250,000 gallon concrete tank. That project will now not be built in its

entirety because the sponsor couldn't obtain a protection zone for the new spring, and it determined a larger tank is needed.

PROPOSED  
PROJECT:

The sponsor is now requesting financial assistance from the board to redevelop its existing springs, construct a 300,000 gallon concrete storage tank, install about three miles of ductile iron distribution pipeline, purchase interest in a well being drilled and equipped by the LDS Church, and tie the well into the sponsor's culinary system. Technical assistance is being provided by Sowby & Berg Consultants in Heber City.

The project fits in Prioritization Category 2 (municipal project required to meet existing or impending need).

COST ESTIMATE:

The following cost estimate is based on information provided by the engineer:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Spring Redevelopment	2 EA	\$ 12,000	\$ 24,000
2.	300,000 Gal. Tank	LS	270,000	270,000
3.	Well, Tie-in, & Telemetry*	LS	178,000	178,000
4.	DI Pipe			
	a. 12-inch	5,200 LF	25.00	130,000
	b. 10-inch	5,200 LF	22.50	117,000
	c. 8-inch	4,000 LF	19.00	76,000
5.	Fire Hydrant	24 EA	2,500	60,000
6.	Valves & Fittings	LS	12,000	12,000
7.	Service Connection	72 EA	500	36,000
8.	Service Line	1,100 LF	10.00	11,000
9.	Asphalt Repair	18,000 SF	2.00	36,000
Construction Cost				\$ 950,000
Contingencies				95,000
Legal and Administrative				20,000
Design and Construction Engineering				105,000
TOTAL				\$1,170,000

\* Sponsor's portion

COST SHARING  
& REPAYMENT:

The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$ 877,000	75%
Sponsor	<u>293,000</u>	<u>25</u>
TOTAL	\$1,170,000	100%

If the board authorizes the project, it is suggested it be purchased in 30 years at 1% interest according to the following schedule:

<u>Years</u>	<u>Approximate Annual Payment</u>
1-5	\$16,500
6-10	23,000
11-15	31,000
16-20	39,000
21-25	47,000
26-30	54,000

ECONOMIC  
FEASIBILITY:

Since there is not an alternative to the proposed project, benefits are assumed to equal costs. The benefit/cost ratio is therefore 1.0.

FINANCIAL  
FEASIBILITY:

Based on the board's water service affordability guidelines, Center Creek water users could pay up to \$39.00 monthly for all water. The cost of water with the proposed project, based on 72 connections, is as follows:

	<u>Annual Cost</u>	<u>Cost/Conn/Mo</u>
Existing Culinary O&M	\$ 7,400	\$ 8.56
Culinary O&M Savings	(5,000)	(5.79)
New Culinary O&M	7,600	8.80
Existing Secondary Irr. Water	7,200	8.33
Proposed BWRe Assistance	<u>16,500</u>	<u>19.10</u>
TOTAL	\$33,700	\$39.00

The affordability guideline will be met only the first five payments; after that it will be exceeded as new connections added to the system and rise in median income are not expected to keep pace with the increased payments.

Current monthly water rates are \$30 for the first 12,000 gallons, \$10 for the next 2,000 gallons, and

\$15 per thousand over that. Residents also pay \$100 annually for secondary irrigation water.

**BENEFITS:** The project will increase system pressures where they are presently inadequate, provide additional storage for fire flows, eliminate old, leaky pipe, and increase the water supply. The improvements will allow the system to achieve an "Approved" rating.

**PROJECT SPONSOR:** The Center Creek Culinary Water Company was formed about 90 years ago to supply water to area residents and has an "Expired" status with the state Department of Commerce. The original water system consisted of springs and small pipe; it was improved in the late 1960s when the board helped the sponsor finance spring development, cast iron pipeline installation, and construction of the 50,000 gallon tank.

It is anticipated the sponsor will grow by about one connection annually.

**WATER RIGHTS & SUPPLY:** The sponsor's water rights are covered by numbers 55-4186, a24292 (Richardson and Nichol's Springs for 0.125 cfs) and 55-9513, a24311, a29088 (Road Spring and the church well for 94.5 acre-feet).

The current water supply of 89 gpm will increase to 148 gpm with the addition of the sponsor's portion of the church well; spring redevelopment will add an additional, undetermined flow to the system.

**EASEMENTS:** Easements and property will need to be obtained from Wasatch County and private property owners.

**ENVIRONMENTAL:** Since the pipeline, tank, spring, and well work will be in areas previously developed or in cultivated fields, it is not anticipated that destruction of natural habitat will occur.

**WATER CONSERVATION:** The sponsor encourages water conservation with a very progressive rate structure. At annual stockholders meetings, water company officials promote ideas for additional conservation.



SPONSOR'S RESPONSIBILITIES: If the board authorizes the proposed project, the sponsor must do the following before construction can begin:

1. Become registered in good standing with the state Department of Commerce.
2. Obtain approval of State Engineer to change point of diversion (church well water).
3. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
4. Pass a resolution by the appropriate (as defined in the company's Articles of Incorporation and Bylaws) majority of company stock authorizing its officers to do the following:
  - a. Assign properties, easements, water rights, and water purchase agreements required for the project to the Board of Water Resources.
  - b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the Board.
5. Have an attorney give the Board of Water Resources a written legal opinion that:
  - a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.
  - b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.
  - c. The company has obtained all permits required for the project.
6. Have an attorney give the Board of Water Resources a written legal opinion that:
  - a. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.

b. The company's water rights and water purchase agreements applicable to the project are unencumbered and legally transferable to the Board of Water Resources.

In lieu of an attorney's opinion, the company may obtain a title insurance policy in the name of the Board of Water Resources for the easements, rights-of-way, land, water rights, and water purchase agreements necessary for the project.

7. Obtain approval of final plans and specifications from the Division of Water Resources and Division of Drinking Water.

8. Prepare a water management and conservation plan for its service area, and obtain approval of it from the Division of Water Resources.

9. Obtain an IRS Employer Identification Number.

STAFF COMMENTS: The sponsor is desirous of completing the project this summer. As such, it is working to complete the Sponsor's Responsibilities and requests that, if the board authorizes the project, it also consider committing funds.

PROJECT CONTACT PEOPLE:	President:	Duane Sweat 2636 S. Old Settlers Road Heber City, UT 84032 Phone: (435) 654-0137
	Secretary:	Teri Sweat 2637 S. Old Settlers Road Heber City, UT 84032 Phone: (435) 654-2391
	Engineer:	Sowby & Berg Consultants 270 East 300 North Heber City, UT 84032 Phone: (435) 654-0250





BOARD OF WATER RESOURCES

Special Item

Contract Amendment

Conservation and Development Fund

Appl. No.: **E-060**  
Received: 9/11/01  
Approved: 11/2/01  
Authorized: 1/25/02  
Committed: (1st Portion Phase I): 3/20/03  
Committed: (2nd Portion Phase I): 9/19/03  
Amended: 3/11/04

To be Presented at the August 13, 2004 Board Meeting

SPONSOR: **HOOPER IRRIGATION COMPANY**

President: Robert W. Penman  
5375 South 5500 West  
Hooper, UT 84315  
Phone: (801) 985-8429

LOCATION: The project is located in and around Hooper City in Weber County.

PROJECT SUMMARY: The board authorized a four-phased pressurized irrigation system to serve agricultural and residential users. It is anticipated that, when the overall project is completed, about 6,000 acres of farms and 2,400 acres of residences will be under pressurized irrigation; the sponsor's remaining 4,000 acres, in the Taylor and West Weber areas, plan to remain a ditch irrigation system.

The project's first phase, consisting of 16 1/2 miles of 4 to 30-inch pipeline, 28 acre-foot regulating reservoir, and 640 horsepower pump station, is nearing completion. Together these works will serve approximately 850 homes and 900 agricultural acres.

Two additional subdivisions (43 residences) have expressed interest in receiving lawn and garden water from Phase I, which will require an additional 3,000 feet of 8 to 12-inch pipeline and 43 service

connections. To complete Phase I, including extending service to the 43 additional residences, will require \$100,000 more than the sponsor has available. It therefore requests the board commit additional funds and that they be made available through an amendment to the current agreement.

COST ESTIMATE  
& SHARING:

The overall project, estimated to cost \$19.5 million, was authorized based on 85% cost sharing from the board and 15% from the irrigation company. The current and proposed cost estimate and sharing for Phase I are:

<u>Agency</u>	<u>Current Cost Sharing</u>	<u>Proposed Cost Sharing</u>	<u>% of Total</u>
BWRe	\$4,717,000	\$4,802,000	85%
Sponsor	833,000	848,000	15
TOTAL	\$5,550,000	\$5,650,000	100%

PURCHASE  
AGREEMENT:

Board financial assistance for each phase is to be returned at between 3% and 5% interest, depending on the proportion of agricultural and municipal benefit and the individual project phase beneficiaries' ability to pay. The exact interest rate, repayment period, and annual payments are to be determined at the time funds are committed for each phase.

The board's current agreement with the sponsor requires the \$4,717,000 to be returned in 25 years at 3% interest with annual payments ranging from approximately \$199,000 to \$382,000; the payments parallel the state's projected average annual growth rate for Hooper of 2.86%. If the board commits an additional \$85,000 to the sponsor, staff recommends the current agreement be amended to state the board will provide 85% of the total cost of Phase I up to \$4,802,000, and that board funds will be returned in 25 years at 3% interest with annual payments ranging from approximately \$205,000 to \$388,000.

BOARD OF WATER RESOURCES

Special Item

Feasibility Report (Reauthorization) & Committal of Funds

Conservation & Development Fund

Appl. No.: **E-122**

Received: 11/21/03

Approved: 12/12/03

Authorized: 1/30/04

To be Presented at the August 13, 2004 Board Meeting

SPONSOR: **HOLLIDAY WATER COMPANY**

President: George Grover

LOCATION: The proposed project is located in Holladay City on the east side of the Salt Lake Valley in Salt Lake County.

SUMMARY: The sponsor serves culinary water for indoor and outdoor use to 3,891 connections serving approximately 15,000 people. Water comes from Spring Creek Spring, wells, and a connection to a pipeline of Salt Lake City's. Water from the spring is treated by a 2.5 MGD microfiltration plant. The sponsor has a 1 million gallon steel storage tank and a 4 million gallon concrete tank, plus stores 1.2 million gallons in various tanks owned by Salt Lake City. The culinary system is rated "Approved" by the Division of Drinking Water.

The distribution system is 50 year-old ductile iron too small to provide currently required fire flows.

In early 2004 the board authorized a project for the sponsor consisting of a three million gallon concrete storage tank, 2½ miles of looping pipeline to and from storage tanks and wells, and a booster pumping station. That project will now not be built because the sponsor further analyzed water use and determined that additional upgrades to the pipeline distribution system will benefit it more than additional storage.

PROPOSED  
PROJECT:

The sponsor is now requesting financial assistance from the board to replace 7½ miles of 4-inch ductile iron distribution pipeline with 8-inch ductile, add valves and fire hydrants to the system, and replace old, galvanized steel service lines. Technical assistance is being provided by Bowen, Collins & Associates in Draper.

The project fits in Prioritization Category 2 (municipal project required to meet existing or impending need).

COST ESTIMATE: The following cost estimate is based on information provided by the engineer:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Mobilization	LS	\$13,000	\$ 13,000
2.	Traffic Control	LS	58,250	58,250
3.	8-inch DI Pipe			
	a. 2004	19,450 LF	38.00	739,100
	b. 2005	21,850 LF	70.00	1,529,500
4.	Canal Crossing	4 EA	27,750	111,000
5.	Trench Stabilization	LS	10,000	10,000
6.	Gate Valve			
	a. 8-inch	54 EA	940	50,760
	b. 6-inch	8 EA	770	6,160
7.	Air-Vac Valve & Vault	LS	7,325	7,325
8.	Press. Reg. Valve & Vault	LS	34,100	34,100
9.	Old Valve & Box Removal	30 EA	400	12,000
10.	Fire Hydrant			
	a. Install New	26 EA	3,065	79,690
	b. Conn. Exist to New Pipe	8 EA	1,965	15,720
	c. Remove Old	12 EA	400	4,800
11.	Existing 4-inch DI Pipe			
	a. Connects. to New 8-inch	LS	62,000	62,000
	b. Cap Abandoned	47 EA	470	22,090
12.	Service Connection			
	a. Replace Galv. w/Copper	110 EA	600	66,000
	b. Conn. Exist. to New	40 EA	420	16,800
	Pipe			
13.	Road Restoration	11,300 SY	9.00	101,700
Construction Cost				\$2,939,995
Contingencies				294,005
Legal and Administrative				71,000
Design and Construction Engineering				397,000
TOTAL				\$3,702,000

All items except 3b have been bid and will be installed in 2004. The estimated unit price for 3b includes items similar to 1, 2, and 4-13 to be bid and installed in 2005.

COST SHARING  
& REPAYMENT:

The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$1,500,000	41%
Sponsor	<u>2,202,000</u>	<u>59</u>
TOTAL	\$3,702,000	100%

If the board authorizes the project, it is suggested it be purchased in 10 years at 5% interest with annual payments ranging from approximately \$177,000 to \$254,000.

ECONOMIC  
FEASIBILITY:

Economic feasibility of a municipal water project depends on whether it provides the best (least cost or most cost-effective) method of correcting a deficiency in an existing water system and/or providing the most efficient facilities and water supply for future expansion and growth of the municipality.

There are likely no realistic, alternative ways to deliver the same quantity and quality of water to customers other than the proposed project. While there may be alternative approaches to accomplish upgrades to the system through the application of value engineering principles, these are considered variations in design and construction of the proposed project rather than alternatives to it. The benefit/cost ratio for the project is therefore 1.0.

FINANCIAL  
FEASIBILITY:

Based on the board's water service affordability guidelines, Holliday Water Company users could pay up to \$40.94 monthly for water. The cost of water with the proposed project, based on 3,961 projected residential connections when the first annual payment is due, is as follows:

	<u>Annual Cost</u>	<u>Cost/Conn/Mo</u>
Operation & Maintenance	\$798,000	\$16.79
Proposed BWRe Assistance	<u>177,000</u>	<u>3.72</u>
TOTAL	\$975,000	\$20.51

Current monthly water rates start at \$10/month for a 3/4" connection, and increase to \$190/month for a 6"



connection; this includes 60,000 gallons/year/share of stock. Additional water used costs \$0.85/1,000 gallons up to 80,000 gallons, and \$1.10/1,000 over that. The average monthly water bill is about \$32.00.

Although the cost/connection/month is well below the guideline established by the board, the sponsor will likely be making additional improvements to the water system before the proposed board assistance is returned.

BENEFITS:	The project will improve distribution of water and provide fire protection to many areas that currently cannot accommodate fire hydrants.
PROJECT SPONSOR:	<p>Holliday Water Company supplies culinary water to about 2/3 of Holladay City. It has provided water service for the past 100 years, was legally incorporated in 1928, and is currently registered in good standing with the state Department of Commerce. The sponsor's total service connections have increased at an average annual rate of 0.55% the past ten years, with most land parcels in the service area having been developed; that growth rate is expected to continue.</p> <p>There are 7,200 shares of stock in the company, which are not subject to an annual assessment. New meter connections are allowed to buy one share of stock from the company for \$5,000; if they desire additional shares, they must purchase them from other owners.</p> <p>The sponsor has not received assistance from the board in the past.</p>
WATER RIGHTS & SUPPLY:	Holliday Water Company owns water rights in four wells and Spring Creek Spring. It also has an agreement with Salt Lake City for exchange of water rights in Big Cottonwood Creek for treated culinary water:

<u>Description</u>	<u>Right No.</u>	<u>Max. Diversion (ac-ft/yr.)</u>
Big Cottonwood Creek (SLC)	57-7673	1,098
Spring Creek Spring	57-8896	706
Underground Water Well	57-7934	724
Underground Water Wells	57-3127	4,847.05
	57-3128	
	57-3365	
	57-6258	
	57-6259	
Wells	57-8978	17.42
	57-8977	32.58

EASEMENTS: The proposed project will be placed in existing easements.

ENVIRONMENTAL: Since the pipeline will be placed in developed areas, no detrimental environmental effects are expected.

WATER  
CONSERVATION: The sponsor has a water management and conservation plan. The plan encourages xeriscaping and upgrading plumbing to utilize low-flow devices. Educational pamphlets are sent to users informing them of ways to conserve and protect their water resources. The sponsor has in place a rule prohibiting landscape irrigation between the hours of 10 a.m. and 6 p.m.

SPONSOR'S  
RESPONSIBILITIES: If the board authorizes the proposed project, the sponsor must do the following before Board funds will be released:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.

2. Pass a resolution by the appropriate (as defined in the company's Articles of Incorporation and Bylaws) majority of company stock authorizing its officers to do the following:

a. Assign properties, easements, and water rights required for the project to the Board of Water Resources.

b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the Board.

3. Have an attorney give the Board of Water Resources a written legal opinion that:

a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.

b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.

c. The company has obtained all permits required for the project.

4. Have an attorney give the Board of Water Resources a written legal opinion that:

a. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.

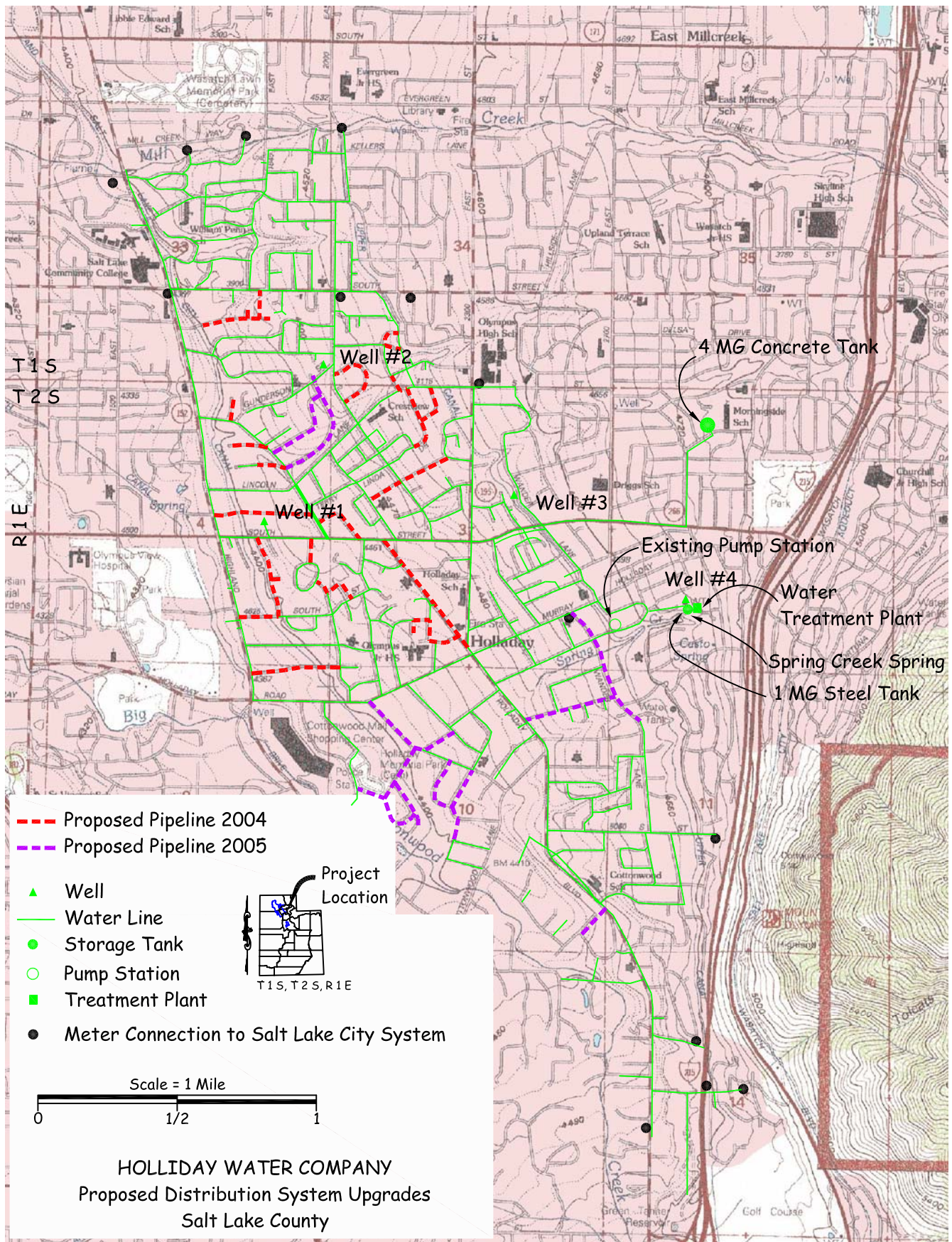
b. The company's water rights applicable to the project are unencumbered and legally transferable to the Board of Water Resources.

In lieu of an attorney's opinion, the company may obtain a title insurance policy in the name of the Board of Water Resources for the easements, rights-of-way, land, and water rights necessary for the project.

5. Obtain approval of final plans and specifications from the Division of Water Resources and Division of Drinking Water.

STAFF COMMENTS: The sponsor has completed the majority of the Sponsor's Responsibilities and requests that, if the board authorizes the project, it also consider committing funds.

PROJECT	President:	George Grover
CONTACT		1887 East 4500 South
PEOPLE:		Salt Lake City, UT 84117
		Phone: (801) 277-2893
	Manager:	Marlin Sundberg
		1887 East 4500 South
		Salt Lake City, UT 84117
		Phone: (801) 277-2893
	Engineer:	Greg Loscher
		Bowen, Collins & Associates
		756 East 12200 South
		Draper, UT 84020
		Phone: (801) 495-2224



BOARD OF WATER RESOURCES

Application Summary

Appl. No. **E-149**

Received: 7/2/04

SPONSOR: **WILLOW CREEK IRRIGATION COMPANY**

President: Quay Mecham  
22 North 200 East  
Axtell, UT 84621  
Phone: (435) 286-4880

LOCATION: The proposed project is located in and around the community of Axtell, about eight miles south of Gunnison in Sanpete County.

PROPOSED PROJECT: The sponsor is requesting assistance to install a pressurized secondary irrigation system in Axtell.

WATER RIGHTS: 

- 63-1002 for 0.5 cfs from well
- 63-2829 for 45 cfs from Willow Creek and 851.6 acre-feet storage in Willow Creek Reservoir.

COST ESTIMATE: \$1,371,000



BOARD OF WATER RESOURCES

Application Summary

Appl. No. ***E-150***

Received: 7/22/04

SPONSOR: ***GRANTSVILLE IRRIGATION COMPANY***

President: Joe W. Peterson  
49 West Durfee Street  
Grantsville, UT 84029  
Phone: (435) 884-5568

LOCATION: The proposed project is located in Grantsville City  
in Tooele County.

PROPOSED PROJECT: The sponsor's pressurized secondary irrigation system  
serving city residents is presently metered on 150  
connections. It requests assistance from the board  
to install meters on the other 850.

WATER RIGHTS: In the name of the board.

COST ESTIMATE: \$428,000

Board of Water Resources  
Tour of Emery and Carbon Counties  
July 8, 2004  
Attendees

Board Members:

Harold Shirley  
Ivan Flint  
Paul McPherson  
George Harmond, Jr.  
Warren Peterson  
Paul Riley

Staff Members:

Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Robert King, Chief, Interstate Streams  
Steve Wilde, Chief, Investigations  
Todd Adams, Chief, Hydrology and Computer Applications  
Mike Suflita, Engineer  
Geralee Murdock, Administrative Secretary

Others:

Mark Page, Regional Engineer, Division of Water Rights  
Gary Roeder, Natural Resources Conservation Service  
Travis James, Natural Resources Conservation Service  
Connely Baldwin, PacifiCorp  
Diane Shirley  
Marlene Flint  
Dorothy Riley



Everyone boarded the bus at 8:00 a.m. from the Holiday Inn in Price, Utah. Larry Anderson welcomed everyone. The bus left for Spring Glen where Tom Bruno, president of the Stohl Mutual Irrigation Company informed everyone of the success of the salinity project in their area. He said four systems combined, totaling 1100 acres – 900 are sprinkler irrigated. These four systems are unique; other areas involved in salinity programs have problems cooperating. He said this has really changed how they do business. They have had about a 50% increase in alfalfa production since the project was installed. The Bureau of Reclamation furnished a grant for the installation of the transmission pipeline. The Natural Resources Conservation System (NRCS) provided financial cost sharing assistance for the onfarm systems, to farmers who voluntarily implement land management and irrigation practices that result in salt saving.

Larry Anderson said in Utah, groups work together. In Colorado it is a much more difficult process to get groups to work together. Utah has about 70% of the projects, Colorado 25%, and Wyoming 5%. Utah has been receiving more than 50% of the money because it has the salinity projects.

Gary Roeder of the NRCS explained their involvement in the salinity program. He said they had been involved in the Price-San Rafael area since 1993. Mr. Roeder explained the EQIP process and said Utah benefited greatly from it. He said the Board of Water Resources has helped people by providing funds to cost share the salinity projects.

Larry Anderson said the Colorado River Basin Salinity Control Forum is made up of representatives from the seven basin states. There are three representatives from each state. Jack Barnett has been the executive director since the forum was created in the 1970's. All seven states support the salinity effort as the salt that's removed in the upper basin states benefits the water going to the lower basin. He said the states are currently receiving federal EQIP funds in the amount of \$20 million; five years ago they received three million dollars. The Colorado Salinity Control Forum wants to make sure they fund the most cost effective projects. The Lower Basin needs to be reminded from time to time that if the sponsors don't get a 70% grant the projects will not be built.

Mark Page, Water Rights Regional Engineer, pointed out the Scofield Reservoir and said it was a storage project that was built in 1926. In 1943 the reservoir was leaking so badly the Bureau of Reclamation provided funding for the new Scofield Dam. The reservoir holds about 30,000 acre-feet of water; today there is only 16,000 acre-feet in the reservoir.

Steve Wilde pointed out the proposed Narrows Dam site. In the 1930's the Gooseberry project plan was put together and it included Scofield Reservoir, a transmountain diversion and Gooseberry Narrows Dam. The Board funded construction of the Transmountain Diversion Tunnel to transmit the water to Sanpete users. The dam is being proposed by Sanpete Water Conservancy District to store 17,000 acre-feet with a yield of 5,400 acre-feet for use in the northern Sanpete area. The Bureau of Reclamation is preparing the EIS. The Narrows project would cost somewhere between \$17 million and \$25 million. Mr. Wilde said Carbon and Sanpete counties disagree about the project. Sanpete says it's a dam that is owed them since the 1940's.

Todd Adams pointed out the cloud seeding research project in the area. The Bureau of Reclamation had money that became available so they were able to do a project this year. The purpose of the project was to provide better documentation on propane seeding effectiveness. Dennis Strong pointed out the Board's \$150,000 cloud seeding money did not go into this project; it was used as cost sharing in the operational program. Emery Water Conservancy District runs its own cloud seeding project without Board funding.

Dennis Strong pointed out the Huntington Reservoir. Mr. Strong said the Board participated in the 80's and 90's in cost-sharing the repairs to both the Huntington Dam and the Cleveland Dam. The Board has provided dam safety monies to Huntington. Mr. Strong stated the skeleton of a woolly mammoth was found in the left abutment. Mark Page pointed out the transbasin drainage that goes into the Fairview Lakes.

Connely Baldwin of PacifiCorp pointed out Electric Lake and explained its problems. He said for many years Electric Lake supplied water to the Huntington Power Plant, however when water came through the floor of the Skyline Mine, the mine was later closed; Electric Lake began to drop in elevation. Currently two wells are pumping water into Electric Lake; without them the lake would have gone dry in 2002.

The Board stopped at the Stuart Guard Station for lunch and toured the Forest Service Museum. Mike Suflita of division staff pointed out several mines in the area. He also talked about the natural gas well field in the area.

Larry Anderson pointed out the Johnny Jensen Hollow, prospective site for the Huntington-Cleveland Dam. Steve Wilde talked about the prospective Huntington-Cleveland Irrigation Company project being presented in the Board meeting on Friday. He said PacifiCorp was a major stockholder in the Huntington-Cleveland Irrigation Company.

At Castle Dale Ross Hinkins and Clyde Magnusson joined the bus tour and explained the Cottonwood Creek Irrigation Company's proposed project while we toured the Cottonwood Creek Irrigation Company's farming area.

Roger Barton joined the bus in Ferron and pointed out the Ferron Irrigation Company's salinity project. He said it began in 1998 and it was estimated that 47,000 tons of salt have been reduced from going into the Colorado River. Robert King pointed out the difference between the areas that have a salinity project and the ones that do not.

Travis James of the NRCS said the Bureau of Reclamation was given the charge to control salinity in the Colorado River in the 70's partly due to the damages to the Lower Basin states and partly due to the Mexican Treaty. The amendment to the Salinity Control Act in 1982 authorized the NRCS to help with an onfarm project. Currently there are seven USDA projects in Utah and Colorado. Utah and Colorado have received a good percentage of the federal funds through EQIP. Utah has received \$52 million which has gone to onfarm projects. Utah projects have been the most successful because of the level of cooperation.

Tour ended at approximately 4:00 p.m.

*Unapproved*  
MINUTES OF THE  
BOARD OF WATER RESOURCES  
BRIEFING MEETING  
July 8, 2004

Emery County Administrative Offices  
75 East Main  
Castle Dale, Utah

MINUTES OF THE  
BOARD OF WATER RESOURCES BRIEFING MEETING  
July 8, 2004

The Board of Water Resources held a Briefing Meeting on July 8, 2004 at 4:00 p.m. at the Emery County offices, 75 East Main, Castle Dale, Utah.

The following were in attendance:

BOARD OF WATER RESOURCES:

Harold Shirley  
Ivan Flint  
George Harmond, Jr.  
Warren Peterson  
Paul Riley  
Bill Marcovecchio  
Paul McPherson

STAFF MEMBERS:

D. Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Steve Wilde, Chief Investigations  
Todd Adams, Chief, Hydrology and Computer Applications  
Robert King, Chief, Interstate Streams  
Mike Suflita, Engineer  
Geralee Murdock, Administrative Secretary

OTHERS:

Mark Page, Regional Area, Division of Water Rights  
George Roeder, Natural Resources Conservation Service  
Travis James, Natural Resources Conservation Service  
Connely Baldwin, PacifiCorp

Board Chair Harold Shirley welcomed everyone to the meeting.

## DISCUSSION OF PROJECTS

### Huntington-Cleveland Irrigation Company

Steve Wilde explained the Huntington-Cleveland Irrigation Company proposed project. Director Larry Anderson said the company had applied for salinity funds through EQIP, and will probably receive funding. Mr. Anderson said the Colorado River Salinity Control Forum is interested as this is a big project and will eliminate a lot of salt. Mr. Anderson said it will probably take a number of years for the project to be built, if approved. Ivan Flint asked if the irrigation company uses all the water they have the rights for. Director Anderson said they have water rights for the sprinkler system and to irrigate 20,000 acres, however they need want to build a small storage reservoir at the head of the system. Mark Page, Regional Water Rights Engineer, said the water rights issue for storage is pretty contentious.

Mr. Anderson said PacifiCorp holds 1/3 share of the stock and is willing to underwrite the \$21 million loan and make the payments back to the Board; PacifiCorp is concerned with the Electric Lake problems. Connely Baldwin of PacifiCorp agreed.

Ivan Flint asked if the Bureau of Reclamation would be involved in the project. Travis James of the Natural Resources Conservation Service (NRCS) said the Bureau of Reclamation will fund 100% of the main transmission pipeline for the project, and the NRCS will fund up to 75% for onfarm sprinkler system through EQIP.

Board members were concerned with the amount of funds requested, however they were in favor of the concept, and discussed the possibility of funding only the salinity portion, if it was feasible for the company to do without the storage reservoir. They will ask questions of the company's sponsors in Friday's Board meeting.

### Ephraim Irrigation Company South Willard Water Company Chester Irrigation Company

Steve Wilde said the Ephraim Irrigation Company is requesting additional funds. South Willard Water Company is also requesting a \$90,000 increase over what was previously authorized. He said the Chester Irrigation Company requested authorization and committal of funds, but will only be ready for authorization at this time.

### New Applications

Mr. Wilde said there were several new applications in Ivan Flint's area. Mr. Anderson said staff had dealt with all these companies in the past in trying to come up with a sprinkler irrigation project for the area.

### Other Items

Warren Peterson read a letter from the Fountain Green Irrigation Company expressing appreciation to Water Resources and also for B.J. Clark's dedication to the project. They said they would benefit from the changes made and thanked the division for its help.

Meeting adjourned at 4:55 p.m.

*Unapproved*  
MINUTES OF THE  
BOARD OF WATER RESOURCES MEETING  
July 9, 2004

Price City Offices  
185 East Main  
Price, Utah

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## SUMMARY OF BOARD ACTIONS

1. The Minutes of the April 30, 2004 Board meetings were approved with suggested changes. page 1
2. The Board tabled the Huntington-Cleveland Irrigation Company project until a later Board meeting. page 3
3. Funds were committed to the Ephraim Irrigation Company in the amount of \$1.5 million (53%) to be returned in 30 years at 1% interest with an escalating repayment schedule. page 3
4. The South Willard Water Company contract was amended to provide an additional \$90,000 and to state the company will return the \$390,000 (74%) with annual payments ranging from \$15,000 to \$26,000 at 0% interest over approximately 20 years. page 3
5. The Board authorized and committed funds to the Chester Irrigation Company in the amount of \$48,000 (32%) to be purchased with annual payments of \$4,200 at 0% interest over approximately 12 years. page 4
5. The Board granted an additional \$4.18 million (95%) and loaned an additional \$220,000 (5%) to the Piute Reservoir and Irrigation Company; the \$417,500 will be returned at 0% interest over approximately 20 years with annual payments of \$21,000. page 5

## THOSE PRESENT

The Utah BOARD OF WATER RESOURCES met in regular session on Friday, July 9, 2004 in the Price City Offices, 185 East Main, Price, Utah. Chair Shirley presided over the 8:30 a.m. meeting.

### BOARD MEMBERS PRESENT:

Harold Shirley  
Ivan Flint  
Warren Peterson  
Bill Marcovecchio  
George Harmond, Jr.  
Paul Riley  
Paul McPherson  
Brad Hancock was absent

### STAFF MEMBERS PRESENT:

D. Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Randy Staker, Accountant  
Steve Wilde, Chief, Investigations  
Robert King, Chief, Interstate Streams  
Todd Adams, Chief, Hydrology & Computer Applications  
Mike Suflita, Engineer  
Geralee Murdock, Administrative Secretary

### OTHERS PRESENT:

Sherm Hoskins, Deputy Director, Department of Natural Resources  
Chris Hogge, Engineer, Weber Basin Water Conservancy District  
Brian Baker, Asst. Vice President, Zions Bank Public Finance  
Mark Page, Regional Engineer, Division of Water Rights  
  
Carlyle Tippetts, Board Member, Green River Canal Co.  
Tim Vetere, Green River Canal Co.  
Von Bowerman, Green River Canal Co.  
Edward L. Hansen, Board member, Green River Canal Co.

OTHERS CONT'D:

Dennis Ward, President, Huntington-Cleveland Irrigation Co.  
Ted Curtis, Board of Directors, Huntington-Cleveland Irrigation Co.  
Kay Jensen, Secretary, Huntington-Cleveland Irrigation Co.  
Lee McElprang, Board member, Huntington-Cleveland Irrigation Co.  
Connely Baldwin, Hydrologist, PacifiCorp  
Dave Sharp, Huntington Plant Manger, PacifiCorp  
Cody Allred, Huntington Plant Engineer, PacifiCorp  
Darce Guymon, Environmental Analyst PacifiCorp  
Leroy Mead, Habitat Biologist, Utah Division of Wildlife Resources  
James J. Greenan, Project Coordinator, San Rafael Soil Conservation District  
Marc Stilson, Engineer, R B & G Engineering  
Larry Perkins, Engineer, J-U-B Engineers

Michael D. Larson, President, Ephraim Irrigation Company  
Merrill Daniels, Board member, Ephraim Irrigation Company  
Rod Mills, Managing Director, Nolte Associates  
Steve Benchley, Senior Engineer, Nolte Associates

Keith R. Jensen, Chester Irrigation Co.  
Diane Jensen, Chester Irrigation Co.  
Paul Wright, Engineer, Franson Noble Engineering

Kurt Sorenson, President, Piute Reservoir/Irrigation Company

MINUTES OF THE  
BOARD OF WATER RESOURCES MEETING  
July 9, 2004

Chair Shirley welcomed everyone to the meeting and introduced Mayor Joe Piccolo of Price. Mayor Piccolo expressed appreciation to the Board for holding the Board meeting in Price and for the hard effort and extra time they take towards their job.

APPROVAL OF MINUTES

Ivan Flint made the motion, seconded by Paul Riley to approve the minutes of the April 30, 2004 meetings with suggested changes. The Board agreed unanimously.

CHAIR'S REPORT

Chair Shirley expressed appreciation to Paul Riley for his efforts as chairman of the Board of Water Resources for the past year and presented him with his gavel as a memento of that experience. Mr. Shirley said the Board had gone on a wonderful tour yesterday of Carbon and Emery Counties and expressed appreciation to all those who made it so informative. He also expressed appreciation to the Emery Water Conservancy District for the dinner they prepared for the Board. Chair Shirley introduced Bryan Baker of Zions public finance, Sherm Hoskins, deputy director of the Department of Natural Resources; and Mark Page, regional engineer, Division of Water Rights.

FEASIBILITY REPORT

#E-130 Huntington-Cleveland Irrigation Company

Chair Shirley introduced Dennis Ward, Ted Curtis, Dave Sharp, Connely Baldwin, Kay Jensen, Leroy Mead, Darce Guymon, Cody Allred, Lee McElprang, James J. Greenan, Marc Stilson and Larry Perkins. Steve Wilde reported the Huntington-Cleveland Irrigation Co. delivers ditch water to about 16,000 acres of farmland, pressurized lawn and garden water to 923 homes, and water for PacifiCorp's Huntington power plant. Water is supplied from the direct flows of Huntington Creek and from storage in several reservoirs. Irrigation application efficiencies are around 50%, and canals and ditches lose about 17% of their flow. Late season water shortages exist, plus water moving downward from canals and flood and furrow irrigated farmland leaches salt from the soil into crop root zones, which decreases production and increases salt loading of the Colorado River system, causing damage downstream.

The irrigation company is requesting financial assistance to construct a multi-phased pressurized irrigation system to ultimately serve around 20,000 acres in the Huntington, Cleveland and Elmo areas; a dam to impound up to 3,500 acre-feet for possible regulation and

storage purposes is a major part of the project. The company would like to construct the dam and a diversion pipeline from Huntington Creek first, followed by a number of sprinkle irrigation phases built over about seven years. Design and construction engineering services for the dam will be provided by RB&G Engineering, and for the pressurized irrigation system by J-U-B Engineers.

The total cost estimate of the project is \$66.09 million. It is requested the Board provide \$9.805 million (85%) for construction of the diversion pipeline structure and dam, and \$11.494 million (21%) for the pressurized irrigation and stockwatering systems. This totals \$21.299 million. The Bureau of Reclamation through a proposed Colorado River Salinity Control Program grant is proposed to provide \$27.56 million (51%) for the pressurized irrigation and stockwatering systems. (The Bureau is providing 100% of the funds for the transmission pipeline.) The Natural Resources Conservation Service is proposed to provide \$11.625 million (21%) for the on-farm pipeline distribution system and portable sprinkler equipment; this represents a 75% grant to the farmers for those items.

Under economic feasibility the benefits were summarized: reduced salt loading in the Colorado River, increased agricultural crop production and reduced amount of water PacifiCorp will need to lease for its Huntington Power Plant. PacifiCorp owns 34% of the company's shares and will receive its full share of water when the project is fully implemented. PacifiCorp is negotiating with the irrigation company to provide, over 25 years, funds sufficient to pay all Board cost sharing. Benefit/cost ratio of the project is estimated at 6.0.

If the Board authorizes the project, the irrigation company will be responsible for completing a number of items including resolving its "expired" status with state Department of Commerce and become registered in good standing, and executing agreements with PacifiCorp that guarantee funds sufficient to repay all Board financial assistance.

Dennis Ward said the company really needs this done and said it would be a benefit to Carbon and Emery counties. Director Anderson asked if the storage dam needed to be built at this time. Mr. Ward said they needed the reservoir so the river can be controlled and for winter water. Director Anderson asked if they had a water right sufficient to build the reservoir. Mr. Mead said they had a right to 4,000 acre-feet which can be changed to a storage right and also a right to 3,200 acre-feet which presently exists as a storage right. Director Anderson said when you apply for a change application there is likely to be a protest because there are all types of agreements downstream that were signed years ago on the Price-San Rafael.

Warren Peterson asked about PacifiCorp's position on the project. Dave Sharp of the power company responded that PacifiCorp supports the water conservation and salinity projects to improve drainage efficiency. He said PacifiCorp would have to make sure all water rights issues are taken care of before an agreement can be signed with Huntington-Cleveland.

After considerable discussion, the Board felt this was a good project, however, there were issues that needed to be taken care of before an action could be taken on the project – water rights clarified, a letter from the Bureau of Reclamation stating acceptance for salinity grant money, and the agreement signed with PacifiCorp regarding repayment of the Board's funds.

George Harmond, Jr. said this is a good project and wants to see it succeed, and because of the concerns of the Board made the motion to table the Huntington-Cleveland Irrigation Company project until a later Board meeting. Paul Riley seconded the motion and it was agreed upon by the Board.

## COMMITTAL OF FUNDS

### #E-061 Ephraim Irrigation Company

Chair Shirley introduced Michael Larson, president; Merrill Daniels, board member; Rod Mills, Managing Director, and Steve Benchley, Senior Engineer, of Nolte Associates. Steve Wilde reported a little over two years ago the Board authorized \$1.155 million to Ephraim Irrigation Company for a gravity pressurized irrigation system. The company had to abandon its originally selected pond site; the new site will cost more than the original one, plus the pond size has increased by 11 acre-feet to 36 acre-feet. The company requests the Board commit \$345,000 more than authorized.

Mr. Larson said they had received a grant through the Central Utah Project Conservation Act and with that and company funds they have finally reached the point where they could hopefully proceed with this project this fall if funds are committed by the Board. Mr. Larson thanked the Board for its consideration in this matter.

Warren Peterson expressed a conflict of interest. Paul McPherson made the motion to commit funds to the Ephraim Irrigation Company in the amount of \$1.5 million (53%) to be returned in 30 years at 1% interest with an escalating repayment schedule. George Harmond, Jr. seconded the motion and the Board agreed. Warren Peterson abstained from voting.

## SPECIAL ITEMS

### #E-119 South Willard Water Company

Steve Wilde reported the South Willard Water Company has an agreement with the Board wherein the Board will provide \$300,000 (68%) to help the company build a 700,000 gallon culinary water storage tank and tie it to the company's existing system. The project has been bid and the low bid exceeds the engineer's estimate, largely because the price of steel reinforcing bars is over 200% higher than estimated. The company therefore requests additional funds to help cover the increased costs.

Paul Riley made the motion to amend the contract with the South Willard Water Company to provide an additional \$90,000 and to state the company will return the \$390,000 (74%) with annual payments ranging from \$15,000 to \$26,000 at 0% interest over approximately 20 years. Warren Peterson seconded the motion and the Board unanimously agreed.

### #E-138 Chester Irrigation Company

Chair Shirley introduced Keith Jensen, president; Paul Wright, engineer and Diane Jensen. Steve Wilde reported Chester Irrigation Company, about four miles south of Moroni, delivers water from Canal Creek and Oak Creek to nine shareholders sprinkle irrigating about 650 acres; water is diverted from five ponds on the creeks' drainages. The ponds collect sediment carried by the creeks reducing their effective capacity from 545 acre-feet to 280 acre-feet. Also, the flashboards used in the spillways are difficult and inefficient to maneuver in and out, particularly during high spring runoff.

The company is requesting financial assistance to raise the spillway elevation of each pond about one foot, replace existing flashboard structures with gated structures, level uneven pond embankments, and seal the off-stream pond that loses water to seepage. The project is estimated to cost \$150,000. A Central Utah Water Conservancy District grant is providing \$91,000 or (61%) of the total cost.

Mr. Jensen said the project would increase their water by 150 acre-feet, however, most years they would be able to gain 300 acre-feet.

Warren Peterson made the motion to authorize and commit funds to the Chester Irrigation Company in the amount of \$48,000 (32%) to be purchased with annual payments of \$4,200 at 0% interest over approximately 12 years. Ivan Flint seconded the motion and the Board agreed unanimously.

### Status of Flaming Gorge Water Rights

Dennis Strong reviewed the status of the Flaming Gorge Water Rights. He said before the water right would be approved the company must file a management and conservation plan and also have proof filed by July 1, 2004, if not then a request for an extension must be received. Registered letters were sent out to the applicants, and responses have been received from all but one requesting a two-year extension. The information will be reviewed and then presented to the Board in its September Board meeting.

### DAM SAFETY CONSTRUCTION FUNDING

#### #C-022 Piute Reservoir and Irrigation Company

Chair Shirley introduced Kurt Sorenson, president; and Paul Wright, engineer. Steve Wilde reported the company has completed Phase I of the dam safety upgrade of Piute Dam, which consisted of stabilizing the embankment and upgrading the outlet works. The company is now requesting additional funds to accomplish Phases II and III, which consist of reconstructing the dam's drainage system and constructing an emergency spillway, respectively.

The estimated cost of these portions of the upgrade is \$5.1 million. Because there remains \$700,000 unused from Phase I, however, only \$4.4 million is needed for the last two phases. The company is requesting \$4.18 million in a grant (95%) and a loan of \$220,000 (5%). The Board's current contract with the company will need to be amended to state the total loan amount will be \$417,500.

Kurt Sorenson expressed appreciation to the Board for its help on Phase I of the project and would appreciate consideration on the last two phases.

Warren Peterson made the motion, seconded by Bill Marcovecchio to grant an additional \$4.18 million (95%) and loan an additional \$220,000 (5%) to the Piute Reservoir and Irrigation Company; the \$417,500 will be returned at 0% interest over approximately 20 years with annual payments of \$21,000. It was unanimously agreed upon by the Board.

### DIRECTOR'S REPORT

Director Anderson thanked George Harmond, Jr. and Robert King for their efforts in planning the tour of Emery and Carbon Counties on Thursday. Mr. Anderson introduced Geralee Murdock as his new Administrative Secretary, replacing Nancy Fullmer, who retired. Director Anderson referred the Board to a couple of letters in the Board folder, and suggested they read them, and also pointed out Gene Bigler's obituary. Gene worked for the division for 19 years and passed away suddenly.

Director Anderson said he felt he needed to brief Governor Walker regarding the drought in the Colorado River system, explaining what is happening and what might happen. He then reviewed this information with the Board.

Chair Shirley suggested Jon Huntsman and Scott Matheson be invited to a meeting where the drought situation could be explained to them. Ivan Flint suggested also inviting Governor Walker. Governor Anderson said he would work with Robert Morgan, the Department Director on the proper protocol for contacting the two candidates running for governor. Director Anderson said the division had prepared a "white paper" for Governor Walker on how future water needs will be met. A request was made to send it to one of the candidates, and Governor Walker suggested we send it to all three candidates (before the Republican primary), and it was sent. One of the candidates called back and expressed appreciation for receiving the briefing paper.

Meeting adjourned at 10:50 a.m.



Board of Water Resources  
Tour of  
Metropolitan Water District of Salt Lake & Sandy  
April 29, 2004  
Attendees

Board Members:

Harold Shirley  
Paul McPherson  
Ivan Flint  
Brad Hancock  
George Harmond, Jr.  
Warren Peterson  
Bill Marcovecchio  
Paul Riley

Staff Members:

Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Randy Staker, Accountant  
Steve Wilde, Chief, Investigations  
Greg Williams, Engineer

Others:

Sherm Hoskins, Deputy Director, Department of Natural Resources  
Diane Shirley  
Judy McPherson

Board of Water Resources Tour of Metropolitan Water District of Salt Lake and Sandy facilities  
4/29/04

On Thursday, April 29, 2004, the Board of Water Resources was given a tour of new facilities being constructed by the Metropolitan Water District of Salt Lake and Sandy. In March, the Board gave the district a \$500,000 grant to purchase bond insurance to lower the interest rates on the bonds to finance the construction.

Mike Wilson, assistant general manager of the district, gave the Board an overview of the district and the projects it began working on about five years ago and which it will continue to work on through 2007. He went through the history of the district, its member agencies, its water supplies, water deliveries, and its relationship with Central Utah Water Conservancy District and Jordan Valley Water Conservancy District.

Mike said the district was formed in 1935 in response to the on-going drought and concerns about future water supplies for the Salt Lake Valley. The district sponsored construction of Deer Creek Reservoir, which represents about half of its water supply. Other sources of water are Little Cottonwood Creek, Jordanelle Reservoir and Little Dell Reservoir. It wholesales drinking water to Salt Lake City, Sandy City, and Jordan Valley Water Conservancy District.

The district has been working from a master plan it put together five years ago to upgrade and expand its facilities. The principal projects it is now working on are an expansion of its Little Cottonwood treatment plant, construction of another plant at the Point of the Mountain and a finished water pipeline to interconnect the two. The improvements will ultimately add 113 mgd capacity and cost more than \$250,000,000. The Little Cottonwood plant expansion is expected to be done in 2005 and the Point of the Mountain plant in 2007.

We loaded into vans and drove to the Point of the Mountain to see where water would be diverted from the Provo Reservoir Canal into the pipeline that would carry it to the treatment plant. From there we drove to the treatment plant site, which was mostly excavated last summer. The idea was to save mobilization costs by having a contractor come in and do most of the earthwork so that each contractor working on different components did not have to bring in their own excavation equipment. We viewed the site from ground level as well as from the bench above. As we drove back to the district's offices we were shown points along the alignment for the pipeline between the Point of the Mountain and Little Cottonwood plants.

After lunch, the district gave the board a tour of the improvements being done on the Little Cottonwood plant to expand and update the plant and allow it to meet current and expected drinking water regulations. Since it is not yet summer, only a portion of the plant's capacity is needed thus allowing construction to occur while the plant is still operating.

*Approved*  
MINUTES OF THE  
BOARD OF WATER RESOURCES  
BRIEFING MEETING  
April 29, 2004

Metropolitan Water District of Salt Lake and Sandy  
3430 East Danish Road  
Sandy, Utah

BOARD OF WATER RESOURCES  
BRIEFING MEETING  
April 29, 2004

The Board of Water Resources held a briefing meeting on April 29, 2004 at 2:00 p.m. at the Metropolitan Water District of Salt Lake and Sandy offices, 3430 East Danish Road, Sandy, Utah.

The following were in attendance:

BOARD OF WATER RESOURCES:

Paul Riley  
Harold Shirley  
Bill Marcovecchio  
Brad Hancock  
Ivan Flint  
George Harmond, Jr.  
Paul McPherson  
Warren Peterson

STAFF MEMBERS:

D. Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Steve Wilde, Chief, Investigations  
Greg Williams, Engineer  
Randy Staker, Accountant  
Geralee Murdock, Executive Secretary

VISITORS:

Sherm Hoskins, Asst. Director, Department of Natural Resources  
Diane Shirley

Chair Paul Riley welcomed everyone to the meeting held at the Metropolitan Water District of Salt Lake and Sandy offices.

Director Larry Anderson said the Bear River Commission met in April. They regularly meet twice a year – April and November in Salt Lake City. The Idaho Department of Water Resources will be moving to a new building later this summer and they have invited the commission to hold their November meeting in Boise.

Mr. Anderson said Bear Lake is currently at elevation 5905.60' which allows an irrigation allocation of 85,000 acre-feet (35% of normal) this year to the Bear Lake water users in Utah and Idaho. Idaho and Wyoming are currently diverting water for irrigation in the upper and middle Bear. Utah farmers cannot start diverting water until the end of April. He also said last year lower Bear River water users used 10,000 acre-feet of water less than they had been allocated out of Bear Lake by PacifiCorp. Mr. Anderson also reviewed the Bear River Compact with the Board members.

## DISCUSSION OF PROJECTS

### Hi-Country Estates Homeowners Association

The Board discussed the litigation problems of the association and said before funds can be committed the association needs to provide either a clean water right, legal opinion, or title insurance as collateral. Director Anderson said regarding their overage charges they will also need to add another jump in their rate schedule. Presently they have a flat rate water schedule.

### Mountain Regional Water SSD

Mountain Regional Water SSD is requesting an additional \$248,000 in bond insurance. When they previously came before the Board it was difficult to assess how much funds were needed to cover the bond insurance.

### Consolidated Sevier Bridge Reservoir Company

Steve Wilde said the project has been completed already. It was necessary to complete before the irrigation season began.

### Taylor Flat Irrigation Company

The Board discussed the project with the staff. There were some questions about the type of project being funded.

### City of St. George

Dennis Strong said the City of St. George wants to increase the capacity of their treatment plant at Quail Lake and is requesting \$145,000 to purchase bond insurance for the \$31 million project.

### New Applications

The Board was informed of two new applications, the M&M Irrigation Company and Chester Irrigation Company, both in Sanpete County.

Meeting adjourned at 3:35 p.m.

*Approved*  
MINUTES OF THE  
BOARD OF WATER RESOURCES MEETING  
April 30, 2004

Auditorium  
Department of Natural Resources Building  
1594 West North Temple  
Salt Lake City, Utah

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## SUMMARY OF BOARD ACTIONS

1. The Minutes of the March 11, 2004 Board meeting was approved with suggested changes. page 1
2. The Hi-Country Estates Homeowners Association project was authorized in the amount of \$406,000 (80%) to be purchased in 25 years at 0% interest with annual payments of approximately \$16,300. Title insurance is to be secured as collateral naming the Board of Water Resources as beneficiary. page 2
3. The Board provided an additional \$248,000 to the Mountain Regional Water Special Service District as a grant for bond insurance. page 3
4. The contract for the Consolidated Sevier Bridge Reservoir Company was amended to provide an additional \$75,000 making a total of \$283,000 to be returned in approximately 10 years at 0% interest with annual payments of \$28,000. page 3
5. The Board determined the Taylor Flat Irrigation Company project was a maintenance project; it is the Board's policy not to fund maintenance projects, therefore the project was declined. page 4
6. The Board provided a grant to the City of St. George in the amount of \$145,000 for bond insurance. page 4
7. The Board voted by acclamation to elect Harold Shirley as Chairman of the Board of Water Resources. page 4
8. The Board voted by acclamation to elect Ivan Flint as Vice-Chair of the Board of Water Resources page 4

## THOSE PRESENT

The Utah BOARD OF WATER RESOURCES met in regular session on Friday, April 30, 2004 in the Auditorium of the Department of Natural Resources Building, 1594 West North Temple, Salt Lake City, Utah. Chair Riley presided over the 9:00 a.m. meeting.

### BOARD MEMBERS PRESENT:

Paul Riley  
Harold Shirley  
Warren Peterson  
George Harmond Jr.  
Ivan Flint  
Paul McPherson  
Brad Hancock  
Bill Marcovecchio

### STAFF MEMBERS PRESENT:

D. Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Randy Staker, Accountant  
Steve Wilde, Chief, Investigations,  
Todd Adams, Chief, Hydrology and Computer Applications  
Robert King, Chief, Interstate Streams  
Russ Hadley, Engineer  
Bill Leeftang, Chief Engineer  
Tom Cox, Engineer  
Shalaine DeBernardi, Engineer  
Gina Hirst, Engineer  
Dan Aubrey, Geologist  
Marisa Egbert, Engineer  
Boyd Phillips, Engineer  
Nancy Fullmer, Administrative Secretary  
Geralee Murdock, Executive Secretary

### OTHERS PRESENT:

Sherm Hoskins, Deputy Director, Department of Natural Resources  
Brad Nelson, Civil Engineer, Weber Basin Water Conservancy District  
Kristine Parker, Asst. V.P. Zions Bank

Darrel Woolley, President, Hi-Country Estates Homeowners Association  
Randy Crane, President, Hi-Country Estates Water Board  
Bill Coon, Hi-Country Estates Water Board  
Vern Fisher, Financial Consultant  
Dale E. Gardiner, Attorney  
Byron Colton, Engineer, Psomas Engineering

Jim Carbine, General Manager, Mountain Regional Water SSD  
Scott Green, CFO, Mountain Regional Water SSD  
Laura D. Lewis, Principal, Lewis Young, Inc.

Clyde Bunker, President, Consolidated, Sevier Bridge Reservoir Co.

Robert D. Nielson, President, Taylor Flat Irrigation Co.  
Junius Anderson, Secretary, Taylor Flat Irrigation Co.  
Alan S. Nielson, Watermaster, Taylor Flat Irrigation Co.  
Mike Anderson, Taylor Flat Irrigation Co.

Dan McArthur, Mayor, St. George City  
Jason Burningham, Lewis Young Robertson & Burningham

MINUTES OF THE  
BOARD OF WATER RESOURCES MEETING  
April 30, 2004

Chair Riley welcomed everyone to the Board meeting

APPROVAL OF THE MINUTES

Warren Peterson made the motion, seconded by Bill Marcovecchio to approve the minutes of the March 11, 2004 Board meeting with suggested changes. The Board unanimously agreed.

CHAIRS REPORT

Chair Riley read an excerpt from the “Tragedy of the Commons” by Garrett Hardin and said as Water Resources deals with water and air the excerpt is very applicable to natural resource management.

WATER SUPPLY REPORT

Randy Julander reported the state was near average snowpack at the end of February. Because of the warm temperatures in March, snow melted instead of accumulating. When it gets hot in March that’s probably the worst possible scenario for high runoff. Statewide average as of April 30 is now 55%. The drought is the worst seen since 1961.

Mr. Julander said Bear Lake is very low and if the same amount of runoff is received next year as the past few years there maybe zero allocation from the Bear. Director Anderson explained the people who rely on Bear Lake may not receive any water, however Hyrum Dam filled and is spilling, Porcupine Dam is expected to fill along with Newton and Woodruff Creek; they are all small. It is possible those relying on the storage in Bear Lake will not get any water next year.

FEASIBILITY REPORT

#E-127 Hi-Country Estates Homeowners Association

Chair Riley introduced Darrel Woolley, Homeowners Association president; Randy Crane, Hi-Country Water Board president; Bill Coon, Hi-Country Water Board; Vern Fisher, financial consultant; Dale E. Gardiner, attorney; and Byron Colton, engineer. Gina Hirst reported the association has an 8-inch well that previously produced 85 gpm but now produces

about half that. The static water level in the well has dropped, and the water level recovery time (between pumping cycles) has increased.

The association is requesting financial assistance to drill and equip a 12-inch well, construct a pump house with chlorination facilities, and install pipeline to connect the new well to the system. Technical assistance is being provided by Psomas Consulting Engineers in Salt Lake City.

The project is estimated to cost \$507,000. Based on the Board's water service affordability guidelines, Hi-Country Estates residents could pay up to \$56.58 monthly for water. With the proposed project in place the minimum cost of water for 129 connections will be \$58.92 per connection per month. Active connections are being charged \$16.40 per month for up to 8,000 gallons and \$1.40 per thousand gallons above that. Standby connections are charged \$4.50 per month.

Ms. Hirst said the sponsor's water right, according to the State Engineer's office, is currently under active litigation. The sponsor's attorney is working to correct the problem.

Vern Fisher said Hi-Country Estates has been working on its water situation for many years. The association has funded all its improvements, and a large portion of its capital assessment fees has gone toward legal fees to defend the water right as well as system improvements. Dale Gardiner, attorney, said the Hi-Country Estates Homeowners Association has a lot of litigation going on, but it's not about the water right. That issue was resolved in 1997. Warren Peterson asked what litigation was pending. Mr. Gardiner explained the litigation involving the Foothills Water Co. He said that issue is going to court in August, and has nothing to do with the water right.

Warren Peterson asked the association to explain its emergency connection with Herriman City. Randy Crane said it was set up in case the well goes down. Mr. Fisher said the connection is to supply up to 55 acre-feet of water, and is basically used for emergency or standby.

Bill Marcovecchio made the motion to authorize the Hi-Country Estates Homeowners Association project in the amount of \$406,000 (80%) to be purchased in 25 years at 0% interest with annual payments of approximately \$16,300. Title insurance is to be secured as collateral naming the Board of Water Resources as beneficiary. Warren Peterson seconded the motion and the Board agreed unanimously.

## SPECIAL ITEMS

### #E-117 Mountain Regional Water Special Service District

Chair Riley introduced Scott Green, CFO; Jim Carbine, general manager; and Laura Lewis, financial consultant. Dennis Strong reported that last October the Board provided a grant of \$350,000 for bond insurance. The insurance was to reduce the interest rate about 0.5% and

save the district approximately \$5 million in interest payments over the bond's 30-year repayment period. Subsequent to the Board's action, the district obtained a bond rating lower than it had anticipated raising the cost of bond insurance to \$598,000. The district is requesting the Board provide an additional grant of \$248,000 to cover the increased cost of the bond insurance.

Ivan Flint complimented the district on the five miles of pipe in the ground as it has been a goal for ten years. He also said it was historic that Park City and the Mountain Regional Water Special Service District were able to agree to work together. Jim Carbine said Mountain Regional will own the pump station, pipeline and treatment plant, but has an agreement to wheel Park City's water through it. Warren Peterson said this is part of an ongoing effort to consolidate all of these various water systems.

Mr. Flint made the motion to grant an additional \$248,000 to the Mountain Regional Water Special Service District for bond insurance. Brad Hancock seconded the motion and the Board agreed unanimously.

#### #E-124 Consolidated Sevier Bridge Reservoir Company

Chair Riley welcomed Clyde Bunker, president. Bill Leeftang reported the Board previously committed funds to help repair the floor of a tunnel that makes up part of Sevier Bridge Dam's outlet conduit, demolish two sets of old control gates and their housings, and construct one new gate structure. An initial cost oversight, coupled with higher actual costs and additional required work, have increased the cost of the project, therefore the company is requesting an additional \$75,000 to help cover the increased costs.

Warren Peterson declared a conflict of interest as his legal firm does work for the company. Paul McPherson made the motion, seconded by George Harmond, Jr. to commit an additional \$75,000 making a total of \$283,000 to be returned in approximately 10 years at 0% interest with annual payments of \$28,000. The Board agreed unanimously. Warren Peterson abstained.

#### #E-135 Taylor Flat Irrigation Company

Chair Riley welcomed Robert Nielson, president; Junius Anderson, secretary; Alan Nielson, water master; and Mike Anderson, co-owner of the company. Dan Aubrey reported the proposed project is located about three miles south of Lynndyl Town in Millard County. The company has two agricultural irrigation wells. Both wells were used until 1982, at which time the company sold a portion of one of its water rights to Intermountain Power Agency (IPA). The company also sold 85% of its shares in Central Utah Water Company to IPA. From 1982 to 1992 the wells were used occasionally to supplement water rented from IPA. Well #1 has continued to be used since 1992 but well #2 has not because of its reduced flow and efficiency, its increased static water level, and because adequate flow has been available from IPA, well #1, and the 15% retained shares in Central Utah Water Company.

IPA has informed the company that, for the first time since 1983, rental water will not be available this year. To supply the water needed the company proposes to rehabilitate well #2 and use it again, along with well #1. The company is requesting financial assistance to rehabilitate and upgrade well #2 by installing new perforations, opening and developing plugged perforations, conducting pump tests, replacing pump bowls, and refurbishing the pump's electric motor. Division staff will provide technical assistance. The estimated cost of the project is \$35,000.

After considerable discussion, the Board determined this was a maintenance project and not eligible for Board funding. Brad Hancock made the motion to decline the Taylor Flat Irrigation Company project as it is the Board's policy not to fund maintenance projects. George Harmond, Jr. seconded the motion and the Board unanimously agreed. Warren Peterson abstained from voting.

#### #E-137 City of St. George

Chair Riley introduced Dan McArthur, mayor; and Jason Burningham, investment counselor. Dennis Strong reported St. George is planning to expand the Quail Lake water treatment plant by 20 MGD, up to 40 MGD. Construction of the \$31 million project will begin this summer and be completed for use next year. The city is requesting the Board provide a grant in the amount of \$145,000 for bond insurance.

Mayor McArthur said St. George has experienced tremendous growth over the past 20 years, continues to grow, and expressed the need to expand the Quail Lake water treatment plant. He recited two poems for the Board (copies attached) one explaining the need to tackle a difficult challenge, and the other just for fun.

Harold Shirley made the motion, seconded by Bill Marcovecchio, to grant \$145,000 to the City of St. George for bond insurance. It was unanimously agreed upon by the Board.

#### ELECTION OF OFFICERS

Chair Riley said the precedent set by Warren Peterson for the chair to only serve one year, is the reason he desires to step down as chairman of the Board, and opened the nominations for chairman. Warren Peterson nominated Harold Shirley as Board chair. George Harmond Jr. seconded the motion. Brad Hancock moved nominations cease and the rules be suspended and put Harold Shirley in by acclamation. Ivan Flint seconded the motion and the Board agreed unanimously.

Chair Riley opened nominations for vice-chair. Warren Peterson nominated Ivan Flint as vice-chair. Bill Marcovecchio seconded the motion. Paul McPherson moved nominations cease and put Ivan Flint in by acclamation. George Harmond Jr. seconded the motion and it was unanimously agreed upon by the Board.

Director Anderson expressed appreciation to Paul Riley as chairman. He said it's been enjoyable working with Mr. Riley this past year, and looked forward to working with Harold Shirley as the new chairman. Mr. Riley said it was a pleasure working with the staff and the Board.

## DIRECTOR'S REPORT

Director Anderson referred the Board to a memo in the Board folder regarding the Colorado River Endangered Fishes Program, and asked Robert King, the division's technical person, to brief the Board and bring them up-to-date on what's going on. Mr. King informed the Board of recent developments in the program. Sherm Hoskins, Department Deputy Director, and the Endangered Fishes Implementation Committee member, informed the Board of two projects he thought would interest them.

Director Anderson referred the Board to a report and a memo regarding Water Conservation. He said on April 23, 2004 Governor Walker came to the Natural Resources Building to kick off a conservation campaign for this year, and also signed an executive order to state agencies directing them to be sure and implement water conservation measures within their agencies. He said TV advertisements should be showing up soon relating to our conservation program. Director Anderson passed out conservation magnets to the Board and told them to take some and give them to their neighbors.

Mr. Anderson referred the Board to copies of letters sent to the federal government supporting funding for the various agencies relating to the Colorado River Salinity Control funding program. He said much of the money goes to the Price-San Rafael area and also the Uinta Basin. He said the water's going much further for agricultural irrigation, and the farmers are getting better crops. It's all very positive. The Board will be touring the Price-San Rafael area in July and will see some of the ongoing projects.

Director Anderson said the BLM and the Forest Service are updating many of their resource management plans. The Department of Natural Resources has received a massive number of plans to review. Val Payne is the department employee responsible for trying to keep track of all the plans. Mr. Anderson said our division reviews them as well as all the other divisions. He suggested the Board members look at the resource management plans for their area.

Bill Marcovecchio asked if the salt had been decreased in the lower end of the Colorado River. Mr. Anderson explained the requirements that need to be met at various points in the river system.

Mr. Anderson said a letter was sent to Kitty Roberts requesting a permit to drill a couple of exploration holes at Lake Powell right on the edge of the site that we think may be an excellent site for tapping the lake for the Lake Powell pipeline. She hasn't replied yet, however if the permit is received a driller will be able to go down and drill through the materials.



Chair Riley informed the Board the 19<sup>th</sup> annual water education awards banquet was held on March 27. Mr. Anderson said the posters were all done by 4<sup>th</sup> graders this year. Previously the contest was for grades K-6, however the water unit is taught in the 4<sup>th</sup> grade and the educators felt the contest would relate more to them. This year's pictures are hanging in the hall by the Division of Water Resources offices.

Chair Riley expressed appreciation to Nancy Fullmer for her efforts as secretary to the Board of Water Resources and wished her well in her retirement. Nancy thanked Chair Riley and said how much she had enjoyed working with the Board.

#### NEXT BOARD MEETING

The next Board meeting will be held July 9 in Price. The Board members will tour the Price-San Rafael area on July 8.

Meeting adjourned at 11:15 a.m.